PE. JC PER 20 700 E

Sheet

PTC/SB/08A (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for Form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of 2

	Compate ii knowii	
Application Number:	10/616,796	
Filing Date:	July 10, 2003	
First Named Inventor:	Timothy P. Gibson et al.	
Group Art Unit:	2631	
Examiner Name:	Not Yet Assigned	
Attorney Docket Number:	H0004400	

	-			U. S. PATENT DOCUMENTS		
Examiner Initials*	xaminer Cite nitials* No.1 Number		Document Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
SV		6,185,248		Wiegand	02-06-2001	
ςV		6,151,354		Abbey	11-21-2000	
ςV		6,072,994		Phillips et al.	06-06-2000	
\mathcal{L}_{Λ}		5,640,694		Milton, Jr.	06-17-1997	
				,		
	1					

FOREIGN PATENT DOCUMENTS									
F	~ 1.	Foreign Patent Do		nent		Date of Publication of	Pages, Columns, Lines,	\Box	
Examiner Initials*	No.1		Office ³	Number ⁴	Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	Ţ
			None						
						ļ		Ш	
	·				· · · · - · · - · · · - · · · · · · · ·			 	
_		-						 	
								\vdash	
								П	
				l i					

Examiner Date (o	. /
Continue Color Col	10010
Signature Considered Considered	$(\mathcal{O}(1))$
Signature \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PTO/SB/08B (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known Substitute for Form 1449B/PTO (Modified) Application Number: 10/616,796 INFORMATION DISCLOSURE Filing Date: July 10 2003 First Named Inventor: Timothy P. Gibson et al. STATEMENT BY APPLICANT Group Art Unit 2631 (use as many sheets as necessary) Examiner Name: Not Yet Assigned Sheet of 2 Attorney Docket Number. H0004400

OTHER REFERENCES - NON PATENT LITERATURE DOCUMENTS AND INFORMATION						
xaminer nitials*	Cite No.1	inctude name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	1/2			
57		None.				
·	,					
	•					
			T			
			\dagger			
			+			
			+			
			-			
			-			
			-			
			-			
			1			

Examiner	< 1 \((1)	Date
Signature	Jonhan Vluhus	Considered 19120106

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

MAR 0 7, 2005

Sheet 1

PTO/SB/08A (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Inder the Reperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known

INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known					
Application Number	10/616796				
Filing Date	07/10/2003				
First Named Inventor	Timothy P. Gibson et al.				
Art Unit	2631				
Examiner Name	not yet known				
Attorney Docket Number	H0004400-1462				

Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
Zv.		^{US-} 2002/118784A1	08-29-2002	Koon H. Teo et al.	
57		^{US-} 6112141A	08-29-2000	Michel Briffe et al.	·
ςV		us- 2003/0072320A1	04-17-2003	Hae-Moon Seo et al.	
W		^{US-} 5909193A	06-01-1999	William C. Phillips et al.	
Š√.		^{US-} 5771396A	06-23-1998	Brian K. Arnold	
ςV		^{US-} 6069583A	05-30-2000	Pierluigi Silverstrin et al.	
$\overline{\varsigma}V$		^{US-} 5936571A	08-10-1999	Gerard A. Desjardins	
<u>E</u> V		US- 5317323A	05-31-1994	Joseph P. Kennedy et al.	
•		US-			
		U\$-			
		US-			
		U\$-		*	
		US-			
		US-	,		
		US-			
		US-			· · · · · · · · · · · · · · · · · · ·
		US-	1		
-		US-			
	t	US-	 	+	

Examiner Initials*	*Cite No.1	Foreign Patent Document Country Code* ** Number ** ** Kind Code* (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	⊤s
SV		EP1168637A	01-02-2002	TRW Inc.		
57		EP1168646A2	01-02-2002	TRW Inc.		
37		WO02/25304A	03-28-2002	Parthus (UK) Limited		L
						L
				1		

Examiner Signature Sonnia Ilmor Date Considered (0/27/06

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Atind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (08-00) Approved for use through 10/31/2002. OMB 0551-0031

/U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE ter the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute TOP TOP TO THE SUBSTITUTE OF A POPULATION TO A POPULATION TO THE SUBSTITUTE OF A POPULATION TO TH Substitute Form 14498/PTO (Modified) **Application Number:** 10/616,796 Filing Date: July 10, 2003 First Named Inventor: Timothy P. Gibson STATEMENT BY APPLICANT Group Art Unit: 2631 (use as many sheets as necessary) Examiner Name: Sheet Attorney Docket Number: H0004400 of 1

		OTHER REFERENCES - NON PATENT LITERATURE DOCUMENTS AND INFORMATION	
xaminer nitials*	Cite No.1	Inctude name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposlum, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	77
57		ANALOG DEVICES, Four-Channel, 100 MSPS Digital Receive Signal Processor (RSP) AD6624A Data Sheet	
ζ,		BRAD BRANNON, Analog Devices, Inc., Basics of Designing a Digital Radio Receiver (Radio 101), Manufacturer Application Note	
2		BRAD BRANNON, Designing a Super-Heterodyne Multi-Channel Digital Receiver, Manufacturer Application Note	
SV		ANDY McCANN and BRAD BRANNON, DSP Brings Base Station SDR Reality, RF Design Magazine, September 2004	
57		PAUL O'SHEA, What's Up With Down Converters, www.eeproductcenter.com, November 1, 2005	
5√		BRAD BRANNON and CHRIS CLONINGER, Soft Radio Runs Into Hard Standards, EE Times, March 19, 2001	
5~		ANALOG DEVICES, VersaCOMM Digital Converters, Manufacturer Data Sheet	
ςV		ANALOG DEVICES Overview of VersaCOMM, Manufacturer Data Sheet, March 26, 2001	
			L
			_
			1

				
Examiner	C / ^ i/ /	/ /	Date	
-	1 1 1 1 1	almo 1		10/27/06
Signature		W 1/2	Considered	(-) (-)
			$\overline{}$	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 699. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.